

25. VERGE TREATMENT GUIDELINES

25.1 VERGE TREATMENT GUIDELINES URBAN AREA

Council encourages and supports the development of road verges in urban areas, either a maintained grass style or a dry garden style or a mixture of both. These are the preferred treatments.

This guideline interprets various existing laws, policies, specifications and does offers general guidance only. Property owners, occupiers and Contractors are obliged to seek advice from Council's Engineering Services

It is accepted by the Shire of Denmark that road reserves form a significant portion of public open space and this area is available to residents for improving their outdoor lifestyle. A well planned and maintained garden greatly enhances the appearance of the neighbourhood. It is the Shire's responsibility to ensure verge areas are maintained to a safe standard and this guideline has been formulated to assist residents in undertaking beautification works, which are kept free of hazards to ensure safe movement for pedestrians.

Property owners may install the following verge treatments:

- Lawns (Refer points I & VI)
- Reticulation (Refer points II & VI)
- Acceptable Hardstand Materials (Refer point III)
- Gardens/Landscaping (Refer points III & VI)
- Street Trees and alignment (Refer points IV)
- Partial hardstand (Refer points V & VI)
- Compacted Material (Refer points V & VI)

25.1.1 LAWNS

Un-reticulated lawned verges do not require Council's approval.

Lawn (Verge Registration)

The registering of verges is no longer applicable within the district and has been superseded by Clause 3.8 of the Shire's Parking Local Law. This law prevents motorists from parking on a road verge without the adjoining property occupier's consent. For further information, please contact Ranger Services at the Shire of Denmark.

25.1.2 RETICULATION

When reticulating verges the following points must be noted:

1. Water pipes must be laid beneath the verge at a depth between 150mm and 300mm. No fitting connected to the pipes can protrude above the surface of the lawn or garden.
2. The pipes and connections must be at least 250mm away from the footpath.
3. The system must contain approved valves, located within the property. These are connected to your supply and fitted so as to give complete control of the flow of water from that point.
4. Where reticulation extends to the kerb line, half sprinklers must be used. These will direct the flow of water away from the paved road surface.

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5. Reticulation sprinklers are not to spray water on a footpath or road and watering is to be restricted to times where inconvenience to pedestrians, cyclists and motorists is at a minimum.
6. Should damage to any utility services (water, telecom, power etc) occur, the damage will be made good by the authority having the control of that particular plant, and such expense incurred in reinstating the plant, will be to the property owner.

25.1.3 ACCEPTABLE HARDSTAND MATERIALS

Acceptable verge hardstand materials permitted over no more than one third of the verge (excluding vehicle crossover) are:

- A. Bound materials
 - Pavers
 - Concrete
 - Asphalt
 - Spray Bitumen
- B. Unbound materials
 - Quarried aggregates
 - Gravel
 - Limestone

25.1.4 GARDENS/LANDSCAPING

Many residents are becoming water conscious when planning their landscaping. This does not mean that vegetation has to be eliminated. Parks and Gardens Services can provide advice on the species of plants best suited to verge areas.

Before commencement, the following conditions of approval should be considered:

1. That an area measured 2.0 metres from the back of kerb and running parallel to the kerb, is kept clear of garden landscaping to allow pedestrians a safe point of refuge on the verge in emergency situations.
2. The applicant accepts responsibility for removal or relocating the plants if required by Council or any public utility.
3. The matured plants are to be kept 300mm clear of any footpath where applicable.
4. The landscape scheme is to be of such a nature as not to create any undue hazard to road users or pedestrians.
5. That no plant be permitted to exceed 750mm in height on the verge to ensure sight lines from crossovers are clear (excludes street trees).
6. The minimum clear understorey height of mature street trees is to be greater than 2.0 metres to ensure sight lines.

25.1.5 STREET TREES ON VERGES AND THEIR ALIGNMENT

In the interests of vehicular and pedestrian safety, as well as keeping services clear, street trees on verges shall be of a specific species planted within a particular alignment.

The resident is entitled to one or two street trees according to the following Table 1. Council will supply and plant the trees however, once planted it is the responsibility of the resident to water the street trees. Any other maintenance required should be referred to the Shire's Parks and Gardens Services.

Table 1: Street Tree Alignment and Quantity

Lot Type	Number of Trees
Standard Lot	1
Corner Lot	1 on short side 2 on long side

The standard alignment for a verge tree is:

1. Central on a standard block.
2. 5 metres from any crossovers.
3. At least 2 metres from the road and front property boundary
4. 10 metres from the road truncation.

For any further information on alignment, please contact Infrastructure Services.

There will be exceptions due to configurations of Lots and existing infrastructure. Please do not be afraid to ask.

The Shire's Parks and Gardens Services has an Officer on staff who supervises native revegetation. It is this officer's position to determine the best trees to plant in each area. Appropriate street trees are chosen not only for their hardiness, but also to provide a consistent theme throughout each neighbourhood.

When requesting street tree(s) please state whether:

1. Overhead powerlines are present.
2. Footpaths are present
3. There is any existing verge planting.

Although all residents are entitled to apply for a street tree, you may decide to select and plant a street tree yourself. Please consult with Engineering Services on 9848 0300 regarding your proposed selection to ensure it is not an inappropriate or hazardous species. Incorrectly chosen or planted street trees will be removed at Council's discretion so please choose wisely.

The following typical tree species are not approved as street trees:

1. Ficus Species (root structure).
2. Salix Species (root structure).
3. *Cupressus Arizonica* (sight line obstruction)
4. All plants listed under Council's "Pest Plants" Local Law.

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This is a list of approved species suitable for use in various applications within the road reserve

Approved Groundcovers			
Botanic name	Common name	Flowers	Size
<i>Chorizema ilicifolium</i>	holly flame pea	Jul - Oct	0.1 - 0.3
<i>Dampiera linearis</i>	common dampiera	Jul - Dec	0.15 - 0.6m
<i>Gompholobium knightianum</i>	handsome wedge pea	Jul - Dec	0.1 - 0.5m
<i>Gompholobium polymorphum</i>	showy pea	Sep - Jan	to 1.2m
<i>Hakea prostrata</i>	harsh hakea	Aug - Oct	0.3 - 2m
<i>Hardenbergia comptoniana</i>	native wisteria	Jul - Oct	climber
<i>Kennedia coccinea</i>	coral vine	Aug - Nov	climber
<i>Kennedia prostrata</i>	scarlet runner - running postman	Apr - Nov	to 1.5m
<i>Scaevola globulifera</i>	n/a	Aug - Dec	0.1 - 0.5m
<i>Scaevola microphylla</i>	n/a	Sep - Mar	0.5 - 0.5m
<i>Scaevola nitida</i>	n/a	Aug - Dec	0.03 - 3m
<i>Scaevola striata</i>	n/a	Aug - Dec	0.03 - 0.3m
<i>Xanthosia rotundifolia</i>	southern cross	Jun - Feb	0.35 - 0.8m

Approved Shrubs to 1m			
Botanic name	Common name	Flowers	Size
<i>Acacia drummondii</i> subsp <i>drummondii</i>	drummonds wattle	Ju - Oct	0.3 - 1.0
<i>Actinodium cunnighammii</i>	albany daisy	Sep - Jun	0.15 - 1.0
<i>Brachysema melanopetalum</i>	n/a	Sep - Jan	to 3m
<i>Brachysema praemorsum</i>	n/a	Sep - Feb	0.5 - 1.5
<i>Brachysema sericeum</i>	n/a	Jun - Nov	to 1.2m
<i>Conospermum caeruleum</i>	bluesmoke bush	Jun - Nov	0.1 - 1m
<i>Dampiera hederacea</i>	karri dampiera	Jun - Jan	0.2 - 1m
<i>Grevillea depauperata</i>	n/a	Mar - Dec	0.1 to 0.8m
<i>Grevillea quercifolia</i>	oak-leaved grevillea	Jul - Dec	0.3 - 0.7m

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<i>Grevillea trifida</i>	n/a	Jul - Feb	0.3 - 1.7m
<i>Hemiandra pungens</i>	snake bush	Jan - Dec	.05 - 1m
<i>Hypocalymma angustifolium</i>	white myrtle	Jun - Oct	to 1.5m
<i>Pimelea ferruginea</i>	pink rice flower	Aug - Feb	to 1.8m
<i>Pimelea rosea</i>	rose banjine	Jul - Dec	0.3 - 1m
<i>Tetradlea hirsuta</i>	black-eyed susan	Jul - Dec	0.1 - 0.9m
<i>Thysanotus multiflorus</i>	many-flowered fringe lily	Aug - Jan	0.1 - 0.5
<i>Ficinia nodosa</i>	knotted club rush	Aug - Apr	0.4 - 1m
<i>Patersonia occidentalis</i>	purple flag	Apr - Jan	0.25 - 0.75
<i>Patersonia umbrosa</i>	yellow flag	Aug - Dec	to 0.9m
<i>Johnsonia lupulina</i>	hooded lily	Sep - Dec	0.3 - 0.8m

Approved Shrubs 1 to 3m

Botanic name	Common name	Flowers	Size (H&W)
<i>Acacia pentadenia</i>	karri wattle	Aug - Nov	2m
<i>Adenanthos obovatus</i>	basket flower	Sep - Nov	0.5 - 2m
<i>Anigothanzus flavidus</i>	tall kangaroo paw	Nov - Jan	to 2m
<i>Beaufortia decussata</i>	gravel bottlebrush	Sep - Jun	to 3m
<i>Beaufortia sparsa</i>	swamp bottlebrush	Jun - Feb	to 2m
<i>Boronia crenulata</i>	aniseed boronia	May - Feb	1 - 1.2m
<i>Boronia heterophylla</i>	red boronia	Sep - Nov	1 - 3m
<i>Boronia megastigma</i>	scented boronia	Jul - Oct	0.2 - 2m
<i>Bossiaea linophylla</i>	narrow-leaved bossiaea	Jul - Dec	0.7 - 2.2m
<i>Calothamnus quadrifidul</i>	common net bush	Jun - Dec	0.9 - 3m
<i>Darwinia citriodora</i>	lemon scented myrtle	May - Dec	0.2 - 1.5m
<i>Gompholobium scabrum</i>	painted lady	Aug - Nov	to 1.5m
<i>Grevillea diversifolia</i>	variable leaved grevillea	Apr - Jan	1 - 6m
<i>Grevillea occidentalis</i>	n/a	May - Feb	0.4 - 1.8m

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<i>Grevillea pulchella</i>	beautiful grevillea	Jun - Mar	0.2 - 1.5m
<i>Hakea ruscifolia</i>	candle hakea	Dec - Jun	to 3m
<i>Hibbertia cuneiformis</i>	cutleaf hibbertia	Jul - Dec	2.5m
<i>Hovea elliptica</i>	tree hovea	Aug - Dec	0.6 - 3m
<i>Hovea pungens</i>	devil's pins	May - Nov	0.2 - 1.8m
<i>Hypocalymma angustifolium</i>	white myrtle	Jun - Nov	0.2 - 1.8m
<i>Isopogon formosus</i>	rose cornflower	Jun - Dec	0.2 - 2m
<i>Lavandula dentata</i>	French lavender	Jul - Nov	to 1m
<i>Leucopogon verticillatus</i>	tassel flower	Aug - Nov	0.8 - 1.5m
<i>Melaleuca incana</i>	grey honey myrtle	Jul - Nov	0.7 - 3m
<i>Melaleuca lateritia</i>	robin redbreast bush	Sep - Jun	0.4 - 2m
<i>Olearia axillaris</i>	salt bush	Jan - Jul	0.5 - 3m
<i>Rosmarinus officinalis</i>	rosemary		
<i>Templetonia retusa</i>	cockies tongue	Apr - Nov	0.3 - 4m
<i>Westringia dampieri</i>	n/a	Jun - Jan	0.2 - 1.5m
Approved Small trees to 10m			
Botanic name	Common name	Flowers	Size
<i>Agonis flexuosa</i>	peppermint (Mt Hallowell)	Jul - Dec	to 10m
<i>Banksia attenuata</i>	coast banksia	Oct - Feb	0.4 - 10m
<i>Banksia grandis</i>	bull banksia	Sep - Jan	1.5 - 10m
<i>Corymbia ficifolia</i>	red flowering gum	Dec - May	2 - 10m
<i>Corymbia ficifolia</i>	red flowering gum	Dec - May	2 - 10 m
<i>Dryandra formosa</i>	showy dryandra	May - Dec	to 4m
<i>Hakea oliefolia</i>	olive leafed hakea	Aug - Oct	2 - 10m
<i>Homalospermum firmum</i>	n/a	Aug - Dec	0.3 - 8m
<i>Kunzea ericifolia</i>	granite kunzea	Jul - Dec	1 - 3m
<i>Kunzea sulphurea</i>	n/a	Sep - Nov	1 - 3.5m
<i>Melaleuca rhapsiophylla</i>	swamp paperbark	Aug - Nov	to 10m
<i>Persoonia longifolia</i>	snottygobble	Nov - Feb	1 - 5m

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<i>Taxandria parviceps</i>	n/a	Jul - Oct	to 4m
<i>Templetonia retusa</i>	cockies tongues	Apr - Nov	0.5 - 4m
<i>Trymalium floribundum</i>	karri hazel	Jul - Dec	to 9m

Trees 10m plus			
Botanic name	Common name	Flowers	Size
<i>Allocasuarina decussata</i>	drooping sheoak		to 15 m
<i>Allocasuarina fraseriana</i>	sheok	May - Oct	5 - 15m
<i>Corymbia calophylla</i>	marri	Dec - May	to 40m
<i>Eucalyptus cornuta</i>	yate	Jan - Nov	2 - 25m
<i>Eucalyptus megacarpa</i>	bullich	Ap - Nov	to 30m
<i>Fraxinus 'Raywoodii'</i>	claret ash		
<i>Jacaranda mimosaefolia</i>	jacaranda		
<i>Liquidamber styraciflua</i>	liquidamber		

25.1.6 HARDSTAND VERGE TREATMENTS

Council permits no more than one third of the verge area (excluding any vehicle crossing) to be sealed with brickpaving, concrete or bitumen. The remaining area is to be treated by sealing is 3.0 metres wide, measured from the back of the kerb and running parallel to the kerb in the verge abutting the property, or alternatively an area of equal size.

If a footpath exists in front of the property, the portion of the verge between the kerb and the footpath is permitted to be sealed. Refer to Engineering's Standard Drawings for options available.

Brick Paving

Schedule of requirements

1. Pavers Minimum 70mm heavy-duty rectangular or square.
2. Brick Paving Pattern Refer to Standard Drawing ES07-8-0.
3. Sand bed 20mm - 40mm thick.
4. Sub-base 100mm gravel or rock base.
5. Edge restraints 250mm wide and a minimum of 80mm deep concrete edge restraint robust enough to withstand vehicle impact and prevent any lateral movement of the bricks. Visible

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edge restraints shall be installed flush to the level of the pavers.

6. Verge gradient A positive 2% slope from the top of the kerb towards the property boundary.

PLEASE NOTE:

Council will not accept liability for replacing any paving bricks, concrete or asphalt located on verges as part of verge treatments, which are subsequently damaged through works undertaken.

Concrete

Schedule of requirements

- | | |
|-----------------------|--|
| 1. Depth | 100mm Minimum |
| 2. Contraction Joints | Minimum depth of 20mm at 2.5m centres. The joints shall be placed at right angles to the kerb. |
| 3. Expansion Joints | Bitumen impregnated joints are not permitted. |
| 4. Strength | Concrete high early strength to 20 Mpa at 28 days |
| 5. Surface Finish | Broomed non -slip. |
| 6. Verge gradient | A positive 2% slope from the top of the kerb towards the property boundary. |
| 7. Delineation | Verge infill is to be delineated from existing paths. |

Asphalt

Schedule of requirements

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|--------------------|--|
| 1. Base Course | Minimum 150mm thick crushed rock free from sand, loam, capstone, roots or other organic matter. The rock must be compacted and water bound to a smooth finish. |
| 2. Pavement | A 30mm thick pavement of 7mm nominal aggregate bituminous concrete. |
| 3. Edge Restraints | A 100mm wide by 150mm deep concrete edge restraint shall be constructed to the outside edges of asphalt. The surface of the edge restraint shall be non-slip broomed finish and shall be flush with the surface of the asphalt pavement. |
| 4. Verge Gradient | A positive 2% slope from the top of the kerb towards the property boundary. |

25.1.7 COMPACTED UNBOUND HARDSTAND AREAS

Compacted unbound material is an acceptable treatment on verges adjoining residential properties provided that the material is less than 19mm nominal size, well graded, waterbound and compacted, or stabilised, to a hard, smooth finish. The depth of such material must be an absolute minimum of 150mm.

This treatment is not permitted on verges, which adjoin properties housing non-residential activities, for example childcare centres, businesses.

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Poorly graded materials such as river stone, crushed brick and other decorative treatments are not permitted unless incorporated into a defined and approved landscaping plan.

Crossovers and Driveways

ALL Crossovers and Driveways up to the property boundary must be sealed and maintained to Council Standards. Approved Treatments are Concrete, Heavy Duty Interlocking Brick Paving, Road base and Bitumen. Please obtain Council's specification for Crossovers prior to commencing Works.

IMPORTANT NOTE: You may be eligible for a Council provided subsidy when up-grading or carrying out new works.

25.1.7 CONDITIONS APPLICABLE TO ALL VERGE TREATMENTS

1. The owner agrees to maintain the area so as not to cause a hazard. Failure to comply may result in removal of the treatment by the Shire's workforce at the owner's expense.
2. All verge treatments are to be kept in a safe and tidy condition.
3. Approval must be obtained through Engineering Services for any alternative treatments, or treatments that do not comply because of verge size, distances etc.
4. The verge must be generally maintained at a positive 2% gradient from the top of the back of the kerb (real or imagined) to the front property boundary. Any alteration to this gradient must be approved by the Manager Engineering Services.
5. No uncompacted gravels, crushed bricks or loose stones are permitted on verges unless specifically approved as part of landscaped treatment. These are easily displaced collecting on the road, footpath and adjoining properties thus posing a hazard to pedestrians and other road users.
6. The placement of obstructions on verge areas is not permitted. Obstructions are objects that could be dangerous to, or restrict access of pedestrians, motor vehicles and cyclists e.g. rocks, stakes and string, fencing, bricks etc.
7. No sporting equipment (i.e.: basketball hoop/stand, cricket wickets etc) may be positioned temporarily or permanently within the verge area. When basketball hoops are located on private property please be mindful of the direction the hoop faces so as to prevent balls entering the road and neighbouring properties.
8. Council reserves the right to remove or disturb any verge treatment for the purpose of carrying out public works, without being liable to compensate any person for such loss and without having to reinstate any treatment including grass or reticulation.
9. No assistance shall be provided by Council for development, ongoing operation, or maintenance costs.